

Managing Noise at Dahlgren

June 2005

A Dahlgren Public Affairs Fact Sheet

What does it mean to manage noise?

Managing noise means performing noise-generating operations only after considering their impacts on the surrounding communities. This involves *predicting, minimizing, and monitoring* noise. The Navy at Dahlgren is committed to this effort. We are expanding our current noise management procedures to include additional noise measuring devices that will improve our ability to assess and control noise from our testing while fulfilling our national defense mission.



Weather balloons are used to collect data for SIPS.

How do we predict noise?

To predict noise levels in the surrounding communities, Dahlgren uses a computer software tool called the *Sound Intensity Prediction System* (SIPS). To calculate the sound distribution of a planned test,

SIPS takes into account the amount of energy that would be released by the test, the landscape of the area, and current weather conditions, which strongly influence how sound is distributed over a particular area. Using this information, SIPS generates maps that show expected noise levels in any given location.

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How do we minimize noise?

At Dahlgren, we are committed to reducing the noise we make as much as we can, consistent with our mission. Before carrying out a test, we predict noise impacts, as described in the previous section. Based on these predictions, we decide whether to proceed with the planned test. *Whenever possible, we:*

- Reschedule testing if weather conditions are not favorable.

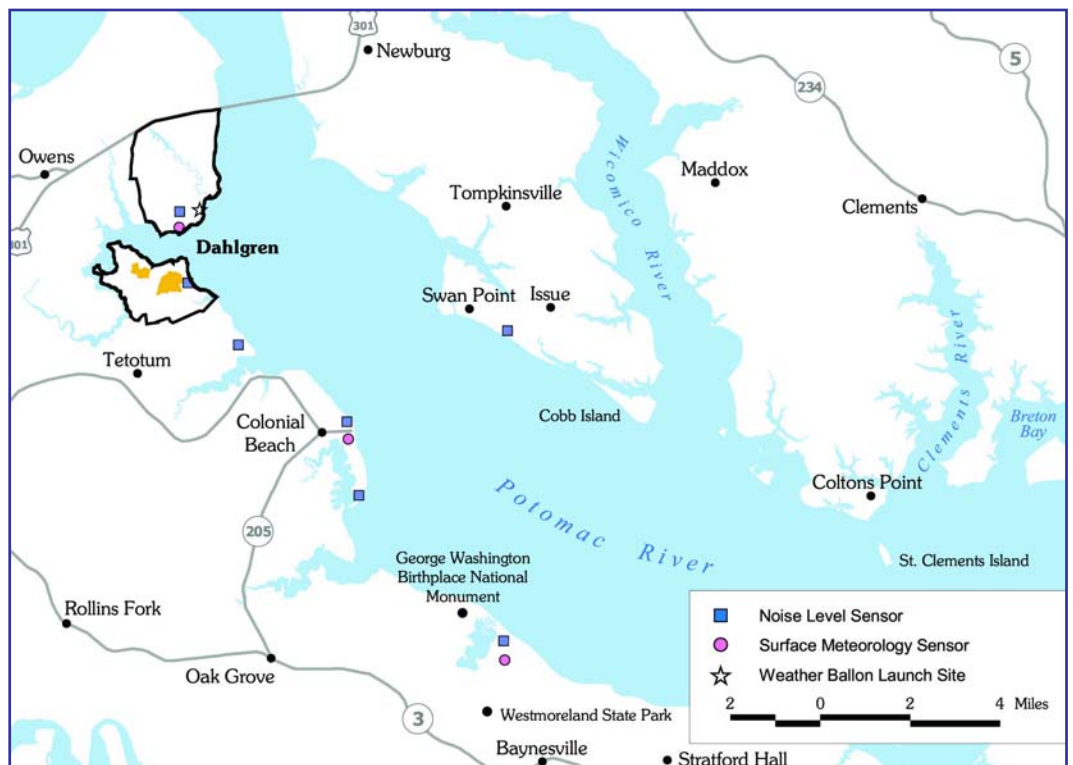
- Schedule operations at reasonable hours during the day.
- Use computer simulation instead of actual testing.

How do we monitor noise?

To monitor and record noise levels, we use both fixed and portable sensors. As shown on the map below, there are six fixed noise sensors along the Potomac River in Virginia, and one in Maryland.

To supplement fixed sensors, refine our noise level measurements, and generate data for locations that are not near a fixed sensor, we use portable noise sensors. Both fixed and portable sensors provide the same data, with the same level of accuracy.

We use these data to verify how much noise we are actually making and to assess the accuracy of the noise predictions generated by SIPS. By comparing predicted noise levels versus actual ones, we are able to refine the modeling capability of SIPS. As a result, our ability to predict noise with accuracy is continuously improving. #



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How can I find out about upcoming noise-generating events?

To find out about upcoming noise-generating events at Dahlgren:

- Call 877-845-5656 (toll free)
- Visit us on the Web at:
www.nswc.navy.mil/wwwDL/RANGE/

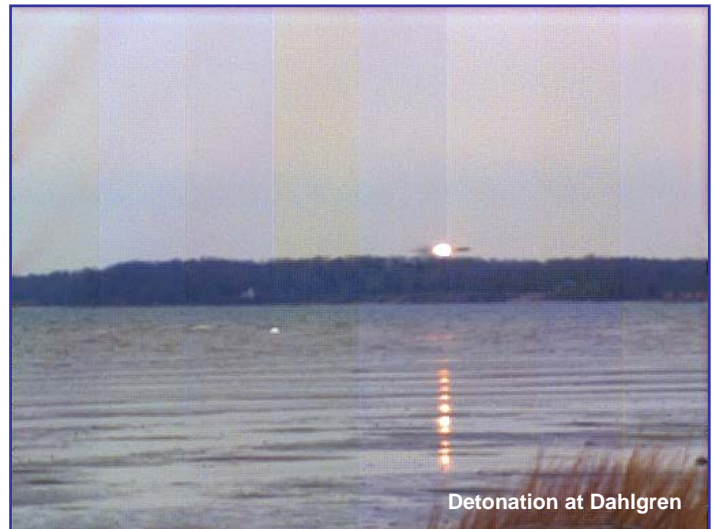


What can I do if I have a comment or a question about noise or noise-related vibrations?

If you have a comment or a question about noise or vibrations you think are caused by operations at Dahlgren:

Call (540) 653-8153

Dahlgren is committed to being a good neighbor and to working with you to minimize the impact of the noise we make on your quality of life. An important tool in this ongoing effort is the feedback you provide us. Therefore, we encourage you to share your comments and questions with us.



For more information on Dahlgren or to offer comments, please contact:

Naval Surface Warfare Center Dahlgren Division
Corporate Communications Office

Phone (540) 653-8154
Fax (540) 653-4679

Or visit us on the Web:
General site: www.nswc.navy.mil
Range site: www.nswc.navy.mil/wwwDL/RANGE/